MX5

Owner's Manual

White's Electronics, Inc.
Sweet Home, Oregon USA
Building the World's Finest
metal detectors for over 60 years.

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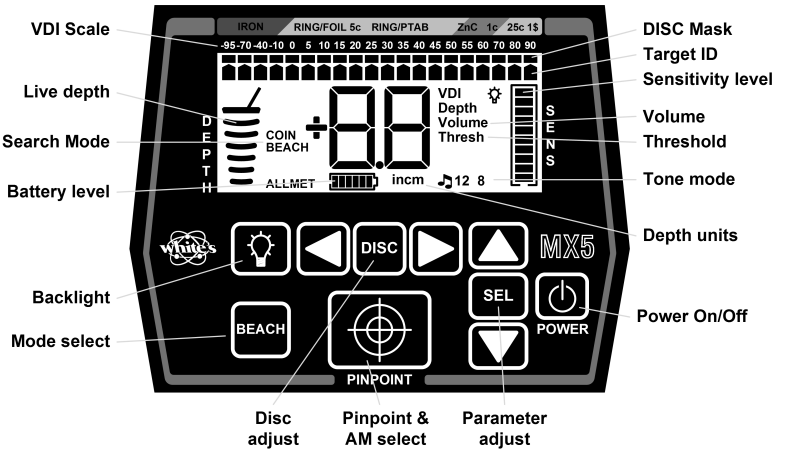
Introduction

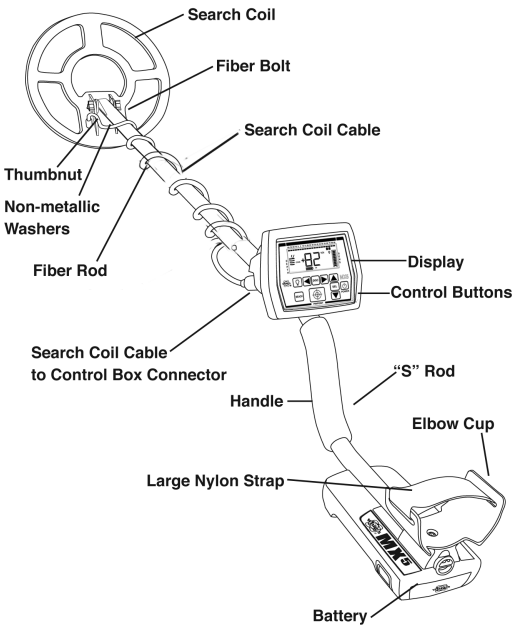


The *MX5* is a high-performance metal detector based on the renowned *MXT* platform but with a redesigned feature set and interface. The *MX5* has state-of-the-art automatic ground tracking (*AutoTrac*®) which maximizes performance across many different ground conditions. It also features a 20-zone discriminator with both multi-tone audio and visual target identification. Each zone may be accepted or rejected, providing the user with a way to ignore certain types of targets like iron or foil.

In normal search mode the audio is threshold-based with multiple Tone ID options for the different discrimination zones. In addition to the audio response, the display provides visual information with an icon cursor that points to a probable target type and a Visual Display Indicator (VDI) number that provides even more detailed target information (see **More Info** for an explanation of VDI numbers). An estimated target depth is indicated by the depth bar. The Pinpoint and All Metal modes also provide an audible threshold tone, in addition to a user-selectable VCO response or a loudness response (non-VCO).

The *MX5* requires 8 "AA" batteries which typically provide 30 hours of operation. Using the optional display backlight will increase battery consumption by approximately 20%.

Assembly



1. Remove all parts from the shipping carton and check assembly diagram to ensure all parts are present.
2. Install black rubber washers on fiber clevis/lower rod, insert clevis lower rod onto loop ears. Use only nonmetallic washers, fiber bolt, and fiber thumb nut to secure loop/search coil to clevis/lower fiber rod.
3. Insert middle rod into curved "S" rod so that the spring clip engages. Insert lower fiber rod and lock into one of the adjustment holes in the middle rod. The second or third adjustment holes are suitable for average sized adults. A twist of the cam locks prevents wobble.
4. Wind the loop cable around the rod assembly, first revolution over the top of the rod, all the way to the top of the curved "S" rod, about five revolutions. Use the black cable retainers, one near the loop, and one near the top of the curved "S" rod, to hold the loop cable in place. Plug the

cable into the jack on the front of the control box and tighten the retainer ring.

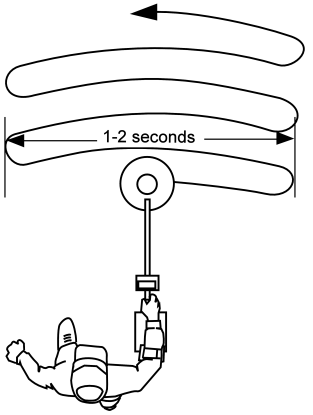
5. Grip the instrument by the handle, with your arm in the elbow cup with strap and sweep the loop/search coil over the floor. If the instrument fit feels uncomfortable, readjust clevis/lower rod length with spring clip button and cam-lock so that search coil can be held near the floor without stooping over.
6. Adjust the elbow cup strap so that it is loose enough for you to slide your arm in and out without loosening each time you want to set the detector down. The elbow cup strap provides extra leverage and control, but may be omitted. The elbow cup is adjustable by removing the Phillips screw.
7. Install the battery pack.

Batteries

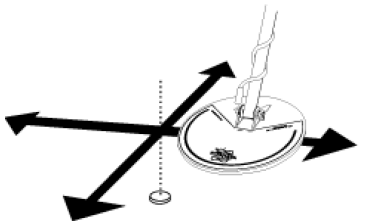
1. Remove the battery pack by pressing both buttons on sides of battery compartment.
2. Slide open the tray cover. Install eight (8) "AA" alkaline batteries taking note of correct (+) and (-) positions and close cover.
3. Slide battery pack into compartment. A vigorous 'slam' may be needed to ensure a good seating.
4. Press **POWER** button. A battery level icon at the bottom of the screen indicates the relative battery strength.
5. Most alkaline batteries will give about 30 hours of continuous operation. Battery life will vary with intermittent use, back-light use, temperature, control settings, target indications, battery quality, battery condition upon purchase, and shelf life. It is a good idea to carry back-up batteries.
6. A rechargeable NiCAD battery pack may be purchased separately. Rechargeable batteries typically provide similar or slightly less run time than alkaline batteries.

QuickStart

1. Turn on the power.
2. The *MX5* has automatic ground tracking. To speed up the initial tracking process, find a spot free of targets and bob the coil up & down a few times (optional).
3. The normal default Sensitivity (SENS) level of 7 bars is reasonable for most situations. If the audio is chattery or constantly overloads, reduce the sensitivity level (**SEL** to highlight Sensitivity area, ▲▼ to change).
4. Sweep the search coil from side-to-side, keeping the coil level and close to the ground. Overlap each sweep by 50% to avoid missing targets.



5. Once a target is detected, use the Pinpoint button to isolate its exact location. Cross the target from two directions (at 90°) and listen for the strongest response.



Basic Controls

The *MX5* user interface is a combination of direct controls (**MODE**, **DISC**) and a select button (**SEL**) which is used in conjunction with the arrow keys (▲ and ▼) to adjust several parameters.

POWER

Besides the obvious function of turning the unit on, the **POWER** button can also suspend operation. Quick-press **POWER** to suspend the *MX5* (during target retrieval, for example); during suspend the *MX5* will occasionally beep, and will automatically power down after 5 minutes. Press and hold the **POWER** button for 2 seconds to turn the unit off.

The **POWER** button is also used to restore factory settings. Simultaneously press the **MODE** and **POWER** buttons to reset the *current* mode. Simultaneously press the **SEL** and **POWER** buttons to reset *all* modes.

BEACH — Beach Mode

The **BEACH** button switches between normal Disc mode and Beach mode. Each mode can be modified with custom settings (such as Disc or Sens) and the modified settings will be retained at power-off. Beach mode allows the *MX5* to work in salt water environments; see the "In Depth" section for more detailed information on how these modes work.

In addition there is an All-Metal mode which is selected by pressing and holding the **PINPOINT** button until you hear a short beep; the Mode will indicate **ALLMET**. The All-Metal mode turns off the discriminator and accepts all targets. See the "In Depth" section for details.

SEL — Adjustment Selector

The **SEL** button rotates through 4 user adjustments:

- **Sensitivity**

The **Sensitivity** control increases or decreases the responsiveness of the *MX5*. When **SENS** is selected a rectangle

appears around the sensitivity level bars. The ▲▼ buttons adjust the level from minimum (1 bar) to maximum (10 bars). Normally, this determines how deep the detector will "see" a target. In general, run the sensitivity as high as possible while maintaining smooth operation. If the audio is chattery or the ground is causing overload, reduce the sensitivity.

- **Volume**

  This is loudness of the target response. Range is 1-99.

- **Threshold**

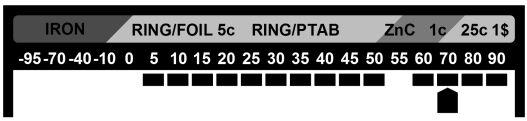
  This is the loudness of the threshold audio, which is the background hum. Range is 0-99. A modest setting (20 is typical when using headphones) helps with faint target responses which may be too deep to trigger a Tone ID but are audible as a threshold variation. This is especially true in All-Metal or Mixed-Mode (Relic mode) audio. A setting of 0 results in silent search (no threshold), in which a target response may not be heard unless it is strong enough to trigger a Tone ID.

- **Tone ID**

  The *MX5* has three selectable Tone ID responses: 1, 2, and 8 tones. Use the ▲▼ buttons to move through the tone selections. See the "In Depth" section for detailed descriptions.

DISC — Discrimination

The Discrimination control allows you to enable or disable the audio response for select ranges of targets. The *MX5* has a 20 segment discrimination control. The ◀▶ buttons move a disc cursor (☗) across the segments, and pressing the **DISC** button will toggle the response for the selected segment. The example Disc Mask below shows that the first 5 segments (mostly the iron range) have been disabled, plus the segment that corresponds to Zinc cents. The remaining segments are enabled. The disc cursor is resting on the "70" segment.



Backlight

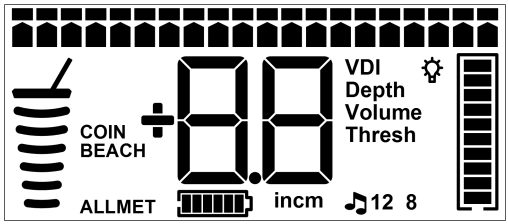
The Backlight button toggles the display backlight for low-light hunting. A screen icon indicates when backlight is on. Keep in mind that the backlight uses additional battery power and should be turned off when not needed.

PINPOINT

Briefly press and release the Pinpoint button to place the *MX5* in Pinpoint mode; you will see PP flash on the screen and hear a brief double-tone. The search mode will switch to **ALL-MET** and the 2-digit number now represents depth instead of VDI. Briefly press and release the Pinpoint button again (or press **MODE**) to return the *MX5* to its previous search mode.

In both All Metal and Pinpoint modes a threshold audio is applied and a target will cause the loudness to increase. The *MX5* also supports VCO[1] audio whereby a target causes the pitch of the threshold to increase. VCO audio is toggled by simultaneously pressing the **Pinpoint** and ▲ or ▼ buttons.

Display

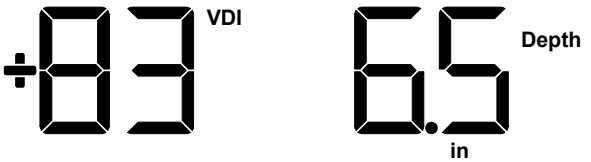


The *MX5* display provides information on the operation of the detector as well as the detected target. On the right is the segmented bar which shows the sensitivity level. On the left another segmented bar shows the estimated target depth in increments of 2" (or 5cm). At the bottom a segmented bar shows the battery strength.

A large 2-digit number gives the VDI response of the target

1. "VCO" means *voltage-controlled oscillator*

in both Disc and All Metal modes and the depth of the target in Pinpoint mode. VDI responses (such as the +83 example shown below) are covered in the "In Depth" section. Below 10" the



numeric depth is given in ½" increments with a decimal point. The example below shows 6.5 inches. Depth readout can be switched to cm by pressing **PINPOINT** and **SEL** at the same time. Metric depths are in whole centimeters.

Across the top of the display are the segments for 20 discrimination zones. When a target is detected a pointer/cursor points to the zone that corresponds to the type of target. Each zone can be disabled (rejected) by using the Disc keypad buttons to move the cursor and select/deselect each zone. To change a contiguous block, press/hold the **DISC** button and press ◀ or ▶. Rejecting a zone only affects the audio; the display will still show target information even if you can't hear an audible response.

The *MX5* display includes a backlight for extended hunting. Press the backlight button to toggle the backlight. In daylight it can be difficult to tell whether the backlight is on or off, so a backlight icon is also displayed. The backlight will reduce battery life by 20% so it's best to turn it off when not needed.

Search Modes

Coin and Beach modes are discrimination-based modes. They are also known as "motion" modes in that they require the search coil to be in constant motion for the discrimination circuitry to operate properly. If the coil is hovered over a target the response will cease.

All-Metal mode is a non-discrimination mode, but still requires motion to respond because it utilizes a Self-Adjusting

Threshold (SAT) circuit that maintains a consistent threshold level. Pinpoint mode does not use SAT and will respond even when hovering over a target.

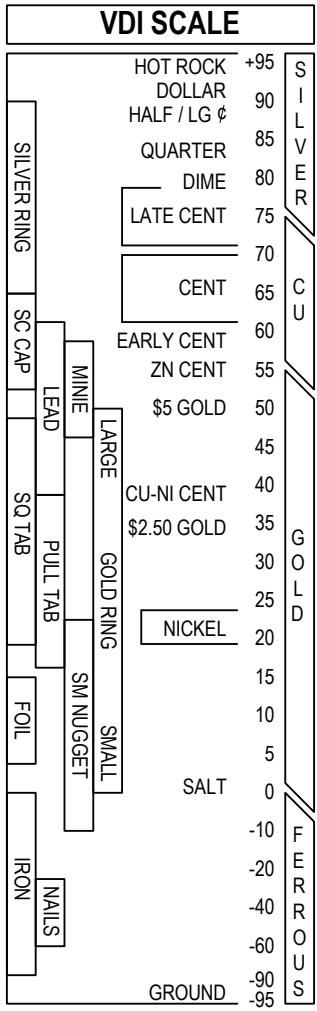
- **Coin** — This is the primary search mode for the *MX5* for most general hunting. By default *AutoTrac*® is enabled and restricted to normal soil, most iron is discriminated, 8-tone mode is selected, and threshold is on.
- **Beach** — Wet salt sand (and sometimes highly fertilized ground) is mildly conductive and difficult for most metal detectors. The **Beach** mode expands the ground tracking range of the *MX5* to handle wet salt sand. You may still need to use a slower sweep rate to avoid falsing. This mode is not recommended for normal soils and may cause some targets to track out (disappear). Also generally not needed for dry beach sand. This mode otherwise behaves like the Coin mode.
- **All Metal** — The All-Metal mode turns off the discriminator and accepts all targets. Tone ID is disabled but VDI numbers are still reported. All Metal mode requires that the coil be in motion in order to respond to a target. If the coil is held steady over a target it will get tuned out after a few seconds.
- **Pinpoint** — Technically Pinpoint isn't normally used as a search mode, but it can be. Pinpoint is the same as All Metal except that ground tracking is locked and SAT is turned off. Without SAT the threshold may slowly drift over time.

In Depth

VDI

VDI stands for *Visual Display Indicator* and is a numeric representation of the target's response. VLF detectors transmit a magnetic field which is disrupted by nearby metal targets. The disruption is seen by the receiver as an increase in signal amplitude (which gives a basic "*I found something!*") but also creates a signal *phase shift*. This phase shift usually indicates the type of target and can be used both for identifying targets and for discriminating or rejecting them.

White's uses a VDI scale of -95 to +95, where negative numbers correspond to ferrous (iron) targets and positive numbers to non-ferrous targets. A chart of typical VDIs is shown on the right. Note that the scale is not linear.

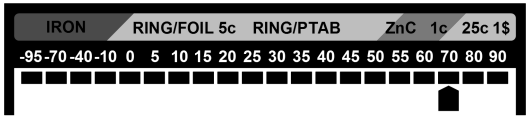


There is a lot of overlap amongst targets. For example, due to the variety of sizes and alloys, gold rings can give the same responses as foil, nickels, and pull tabs. Likewise, pull tabs often look like nickels and vice-versa. Even the smallest of nuggets can extend slightly in the ferrous region.

The VDI is by no means foolproof and should be considered only a probability estimate. As we'll see in the section on Depth, the probability decreases with depth. An excellent approach is to work with test targets (especially planted at different depths) to get familiar with target responses.

Target ID & Tones

The *MX5* has two methods of target identification: visual and audio. The visual consists of the 2-digit VDI number that is displayed plus a cursor that appears across the top of the screen pointing at the VDI zone the target belongs in. The 20 VDI zones are labeled as follows:



The span of each zone begins at the number directly above the zone and extends to the edge of the next zone. Some example zones are [-95 to -71], [-10 to -1], [+0 to +4], [+70 to +79], and [+90 to +95]. A target with a VDI of 78 will move the cursor to the zone marked "70" as shown.

In addition to the visual ID, the *MX5* can also produce a tone ID. There are up to 2 tone modes depending on the search mode:

- **1 tone — Coin, Beach**: Accepted targets produce a single tone. Rejected targets usually create a "null" in the threshold tone and do not otherwise produce a response, although you may hear a short audio chirp as the target is being rejected.
- **2 tones — Coin, Beach:** Accepted targets at or above 0 produce a high tone, accepted targets below 0 produce a low tone, and rejected targets produce a null.
- **8 tones** — There are 8 different tones for 8 VDI ranges:

	Coin, Beach, & Relic
1	-95 to -21
2	-20 to 0
3	+1 to +14
4	+15 to +29
5	+30 to +49
6	+50 to +59
7	+60 to +69
8	+70 to +95

Overload

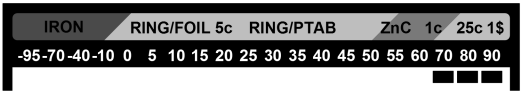
If the received signal is too large to process the *MX5* will produce an *overload* response. This is heard as an obnoxious alarm sound, plus the display will read OL ("OL"). An overload can be the result of a large metal target near the surface, or from extreme ground mineralization. If it is the latter, the only recourse is to reduce the sensitivity level until the detector can operate smoothly.

Discrimination

MX5 has the ability to accept or reject targets based on their VDI response. Each of the 20 VDI zones at the top of the screen includes a marker which can be turned on/off to enable/disable that zone. The 20 markers collectively make up the "discrimination mask" or "disc mask" which determines how the *MX5* responds to targets.

From the VDI scale on Page 13, we can see that disabling the first 4 zones will largely reject iron targets. Most detectorists use this amount of discrimination as a minimum; relic hunters may opt to reject only the -95 zone and accept the rest of the ferrous range. The "5" and "10" zones are where most foil responds, so in trashy areas where gum wrappers are prevalent you may want to reject these zones. However, thin gold and platinum rings and small gold chains fall in these zones, so you would also reject those targets. The same happens when rejecting pull tabs; larger jewelry will also be rejected.

If you hunt in extreme trash and all you care about are silver coins (and maybe copper), you can use an extreme amount of discrimination and forego low conductors altogether:



Keep in mind that while you might get some copper cents (such as wheats) you might lose others such as Indian cents which often fall lower than 70. Also, all nickels will be rejected.

Discrimination Pitfalls

To avoid missing good targets it is important to understand the limitations of target ID and (because it is based on target ID) discrimination. As explained in the section on VDI, target ID is based on the phase shift of a target's received signal. We've already seen that many different types of targets can share VDI responses so that rejecting certain kinds of trash will also reject potentially good targets.

Depth also plays a role. A strong target signal (either from a shallow target or a large target) provides for a strong and repeatable phase response from which we can extract a fairly reliable VDI. As the target signal weakens, its VDI becomes less reliable. This can show up as an inconsistent target response as the coil is repeatedly swept over the target. It is not unusual for deep targets to produce an inaccurate target ID, and perhaps even cross over into an adjacent (and perhaps rejected) target zone.

Furthermore, ground mineralization can cause errors in target phase. Even targets of moderate depth can produce an inaccurate target ID if ground mineralization is severe enough. This can also push the VDI into an adjacent discrimination zone. Therefore it is important to be aware that when you notch out a particular disc segment it is possible to lose targets that normally don't fall in that segment. For example, suppose you notch out the zones for "5" and "10" to get rid of foil trash; nickels that normally might respond with a VDI of "20" could get pushed into the "10" zone due to severe ground, at which point they would be rejected.

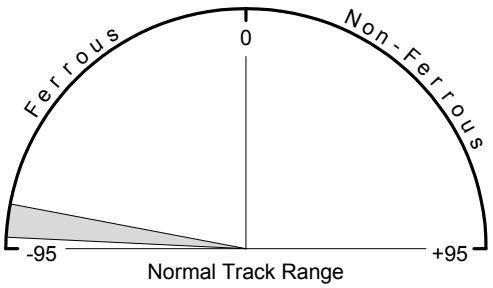
Reliance on target ID should be tempered, and discrimination should be used with care. A "test garden" with multiple types of targets buried at various depths is a good way to see how target responses behave and to hone your skills in reading these responses.

Ground Balance & Tracking

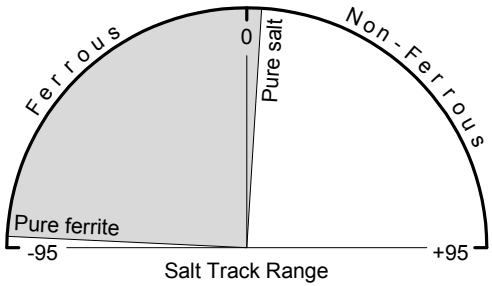
Most soils contain iron-based minerals which affect metal detectors. We generally call this *mineralization*. These ferrous minerals usually don't respond like metal targets but still upset the delicate balance required of VLF detectors. In fact, the signal strength from ground minerals can many times greater than that of an average buried coin.

It is possible to largely null out the ground signal and leave only target signals. This is done with a combination of special tuning in the receiver plus filters. The tuning portion is what we call *ground balance*. Some detectors have a fixed (preset) ground balance which is optimal for one type of mineralization; in other types of ground it may not be optimal and will result in loss of depth. The *MX5* has a variable ground balance with the ability to automatically track changes in soil mineralization. This system (called *AutoTrac*®) keeps the *MX5* tuned for optimal performance in most ground conditions and results in better detection depth.

Most ferrous mineralization produces a response with a VDI of -93 (for pure ferrite) up to perhaps -88 or so. This is at the extreme end of the ferrous (iron) region. Most small iron targets (nails and so forth) reside in the middle of the ferrous region. To prevent tracking to iron targets the *AutoTrac*® system has an upper limit on the track range of -88 (VDI). Sometimes we draw the VDI scale as a semicircle, with ferrous (-95 to 0) on the left and non-ferrous (0 to +95) on the right; we can use this to show the normal range of ground tracking:



Some soils, especially coastal beaches, contain salts which appear as a conductive target. Wet salt sand and seawater are especially conductive and respond with a VDI of around +5 which is in the region of foil. While we could just notch out this portion of the disc mask to ignore salt responses, the presence of these responses (even though ignored) will still tend to mask out desired target responses. In **Beach** mode, the *MX5 Auto-Trac*® system is expanded to track all the way up to the salt region (VDI=+5):



Because the track range now includes the entire ferrous region, it is possible for iron targets to cause tracking errors. Therefore, if a target gives an initial response and then quickly fades away on subsequent short sweeps, it is likely an iron target. Using Pinpoint mode will lock tracking and allow you to zero in on the target. You may first need to move off the target and bob the coil a couple of times to re-establish a correct ground balance point, then switch to Pinpoint mode.

All-metal VCO

For both all-metal and pinpoint modes the audio response can be set to VCO by simultaneously pressing the **Pinpoint** and ▲ buttons. VCO audio provides a variable pitch response which rises as the target strength increases. Non-VCO audio provides a variable loudness response and is selected by pressing the **Pinpoint** and ▼ buttons. The human ear is more sensitive to pitch changes, so with VCO audio very faint responses are easier to discern.

Misc Tips

Sensitivity (again)

There is a strong desire to always run a detector at maximum sensitivity. However, this not only increases the response to target signals, but also that of ground signals and electromagnetic interference (EMI). A common mistake is to assume that higher sensitivity will always give better depth. In air tests this is generally true, but ground results can depend on the amount and type of mineralization. The maximum level is usually only useful in the very quietest locations, and for most hunting you will probably need to use a lower setting. In general, set the sensitivity as high as possible to get a smooth, chatter-free threshold audio, but no higher.

Bottle caps

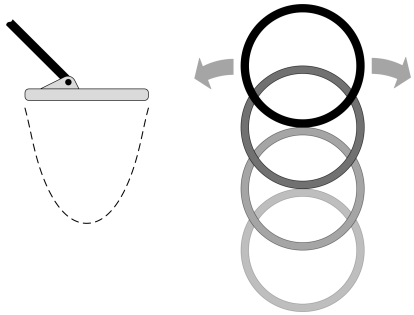
Steel bottle caps are a little different than most iron targets as they have both a magnetic response and an eddy current response. As such, the composite response can appear either ferrous or non-ferrous, and the response further depends on the type of loop being used. With a DD loop bottle caps often look like a US quarter, and with a concentric they often look like a US nickel. However, they tend to give an inconsistent audio response as sweep speed is varied. The audio often rolls between ferrous and non-ferrous. This is easier to distinguish in multi-tone modes and with some practice you will learn how to recognize the audio responses of most bottle caps.

Coil Size

With any metal detector, the size of the search coil presents a trade-off between depth and sensitivity. A larger coil offers better depth on larger targets at the expense of small-target sensitivity, and a smaller coil has better sensitivity to small targets, but at a lesser depth. A small coils also does a better job of separating targets when hunting in trashy areas.

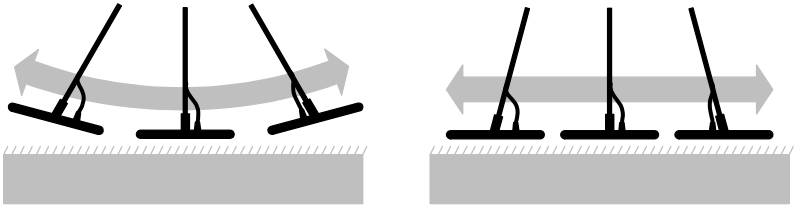
The *MX5* comes standard with a 9" concentric coil. Several optional coils are available through your White's dealer. Any of the *Eclipse*-series coils (made for M6/MXT/DFX/V3) will work with the MX5.

Sweep Methods



Proper sweep technique is important with any detector. Round coils tend to have a conical pattern of sensitivity as illustrated here. As such, coverage at maximum depth is less than the size of the coil, so it is always recommended that successive sweeps are overlapped by about 50%.

In addition overlapping each sweep, it is important to keep the coil close to and parallel to the ground. Pendulum-swinging the coil results in loss of depth, and if the ground balance isn't perfectly set the variation in loop height will create a ground response. The following illustration shows improper and proper coil sweep motion.



Wrong **Right**

Finally, sweep speed affects target response and depth. Some detectors are designed for an exceptionally slow sweep speed, some need a fast sweep. The *MX5* works best at a moderate rate of about 3 feet per second. Somewhat slower or somewhat faster is fine, but whipping the coil at a fast rate is a good way to miss deeper targets. The bottom line is: swing level, moderate speed, and overlap.

Sizing, Pinpointing, and Digging

When a target is detected move the coil well away from the target area and quick-press the Pinpoint button to switch to the Pinpoint mode. A normal sweep over the target in Pinpoint mode will give an idea of target size. If the response is narrow then it is likely a small coin-sized target. If the response is broad then it could be e.g. a beer can. Small shallow targets can give a broad response, and large deep targets can give a narrow response, so use judgement with this.

Once you have determined that you want to dig a target, use the Pinpoint mode to zero in on the location. A criss-cross pattern works best, especially using VCO audio to listen for the peak tone. Watch the ground through the open coil to better determine the exact spot.

Be mindful of proper digging techniques when extracting the target. Use the smallest appropriate digging tool, especially in public areas. Learn how to cut plugs that avoid turf damage or, better yet, how to "pop" coins. There are lots of videos on *YouTube* that demonstrate good extraction protocol.

Quick Reference

Power: Power on, press/hold for power off

Power: Quick-press to suspend operation

BEACH: Enables/disables Beach mode

SEL: Rotates through Sens, Volume, Threshold, and ToneID controls

BEACH + **Power**: Reset the current program

SEL + **Power**: Reset all programs

▲▼: Changes control settings

Pinpoint: Quick-press for Pinpoint mode

Pinpoint: Press/hold for All Metal mode

Pinpoint + ▲: Selects VCO audio

Pinpoint + ▼: Selects non-VCO audio

Pinpoint + **SEL**: Toggles in/cm readout

◀ ▶ : Moves the cursor across disc zones

DISC: Toggles accept/reject for current zone

Backlight: Toggles display backlight

Specifications

Operating mode . . . . . VLF-IB
Frequency . . . . . 14 kHz
Programs . . . . . Coin, Beach
Search modes . . . . . .Disc, Beach, All Metal
Ground balance . . . . . .AutoTrac
Disc Audio . . . . . .Threshold search with (optional) Tone ID
All Metal Audio . . . . . VCO or non-VCO, selectable
Audio output . . . . . .Speaker, headphones
Search coil . . . . . 9" Concentric
Search coil compatibility . . . . .Eclipse series (MXT/DFX/V3)
Weight . . . . . 3 lbs 9 oz
Length . . . . . .45 - 50 inches, adjustable
Batteries . . . . . (8) AA alkaline
Battery life . . . . . 30 hours typical
Warranty . . . . . 2 years, transferrable

Customer Support

Questions concerning your *MX5*? There are three ways to contact us:

Internet: **http://whiteselectronics.com/support.html**

Phone:

1-800-547-6911 (US) **(0044) 1463 223456 (UK)**

Or mail us:

White's Electronics
1011 Pleasant Valley Road
Sweet Home, OR 97386

White's Electronics
35 Harbour Road
Inverness, Scotland
IV1 1UA

Warranty

If within two years (24 months) from the original date of purchase, your White's detector fails due to defects in either material or workmanship, White's will repair or replace at its option, all necessary parts without charge for parts or labor.

Simply return the complete detector to the Dealer where you purchased it, or to your nearest Authorized Service Center. The unit must be accompanied by a detailed explanation of the symptoms of the failure. You must provide proof of date-of-purchase before the unit is serviced.

This is a transferable manufacturer warranty, which covers the instrument two years from the original purchase date, regardless of the owner.

Items excluded from the warranty are non-rechargeable batteries, accessories that are not standard equipment, shipping/handling costs outside the continental USA, Special Delivery costs (Air Freight, Next Day, 2nd Day, Packaging Services, etc.) and all shipping/handling costs inside the continental USA 90 days after purchase.

White's registers your purchase only if the Sales Registration Card is filled out and returned to the factory address by your dealer, soon after original purchase for the purpose of recording this information, and keeping you up-to-date regarding White's ongoing research & development.

The warranty does not cover damage caused by accident, misuse, neglect, alterations, modifications, unauthorized service, or prolonged exposure to corrosive compounds, including salt. Duration of any implied warranty (e.g., merchantability and fitness for a particular purpose) shall not be longer than the stated warranty. Neither the manufacturer or the retailer shall be liable for any incidental or consequential damages.

Some states however, do not allow the limitation on the length of implied warranties, or the exclusion of incidental or consequential damages. Therefore, the above limitations may not apply to you. In addition, the stated warranty gives you specific legal rights, and you may have other rights which vary from state-to-state.

The foregoing is the only warranty provided by White's as the manufacturer of your metal detector. Any "extended warranty" period beyond two years, which may be provided by a Dealer or other third party on your detector, may be without White's authority involvement and consent, and might not be honored by White's Electronics, Inc.

MX5

Treasure Hunter's Code of Ethics

1. Always check federal, state, county, and local laws before searching.
2. Always obtain the owner's permission before accessing private property.
3. Take care to refill all holes and leave no trace.
4. Remove and dispose of any and all trash and litter found.
5. Whenever possible, return identifiable property to its rightful owner.
6. Never destroy historical or archaeological treasures.
7. Appreciate and protect natural resources, wildlife and property, both public and private.
8. Act as an ambassador for the hobby; be thoughtful, considerate, and courteous at all times.

White's metal detectors are proudly designed, built, and tested in Sweet Home, Oregon USA by the employees of White's Electronics.